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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,483	10/26/2000	Jon Dakss	WMI-004CN3 (8415/5)	8413
21323	7590	01/05/2004	EXAMINER	
TESTA, HURWITZ & THIBEAULT, LLP HIGH STREET TOWER 125 HIGH STREET BOSTON, MA 02110			REKSTAD, ERICK J	
			ART UNIT	PAPER NUMBER
			2613	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/697,483

Applicant(s)

DAKSS ET AL.

Examiner

Erick Rekstad

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-71 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 52-71 is/are rejected.
- 7) ☒ Claim(s) 52 and 65 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

Claim 52 is objected to because of the following informalities: step (e) states in the first line ""fails to discloses two". It should be "fails to disclose two". Appropriate correction is required.

Claim 65 objected to because of the following informalities: step (g) repeats only steps (c), (d), and (e). It should repeat steps (c), (d), (e) and (f). Claim 65 also states in step (f) first line, "fails to discloses two". It should be "fails to disclose two". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 58-64 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US Patent 5,883,633 to Gill et al.
[claim 58]

Gill teaches the method of encoding at least a portion of an image, comprising the steps of:

(a) defining a region of an image having pixels at locations identifiable by two non-collinear axes, each pixel having an appearance (Col 3 Lines 30-42, Col 4 Lines 40-43, Fig 2).

(b) analyzing axis-wise said pixels to determine sequences of pixels having substantially identical appearance (Col 7 Lines 48-67, Col 8 Lines 1-36, Fig 14C).

(c) in the event that said analysis discloses two or more successive pixels having identical appearance, recording a series of ordered triples comprising a first value representing said appearance, a second value representing the number of successive pixels having said appearance, and a third value representing an offset defining a starting position of said two or more successive pixels with respect to a pixel at a known position (Col 9 Lines 42-67, Col 10 34-48)

[claim 59 and 62]

Gill teaches the method of claim 58 and 61 wherein defining two non-collinear axes comprises defining a row and a column (Col 3 Lines 30-42, Col 4 Lines 40-43, Col 10 Lines 41-44, Fig 2)

[claim 60]

Gill teaches the method of claim 58 wherein analyzing a pixel to determine an appearance comprises analyzing for at least one of color, a brightness, and a display mode (Col 2 Lines 9-30).

[claim 61]

Gill teaches the method of decoding at least a portion of an image, comprising the steps of:

(a) defining a region of an image having pixels at locations identifiable by two non-collinear axes, each pixel having an appearance;

(b) reading a series of ordered triples comprising a first value representing said appearance, a second value representing the number of successive pixels having said appearance, and a third value representing an offset defining a starting position of said two or more successive pixels with respect to a pixel at a known position; and

(c) for each ordered triple, rendering pixels in said region using said appearance said number of successive pixels having said appearance beginning at said starting position with respect to a pixel at a known position (Col 10 Lines 17-67, Col 12 Lines 3-19)

[claims 63 and 64]

Gill teaches the method of 61 wherein rendering a pixel comprises displaying said pixel using at least one of a color, a brightness, a blinking, a flashing, and a display mode. Gill teaches the method of claim 61 further comprising the step of recording on a computer-readable medium a representation of said rendering of pixels in said region (Col 12 Lines 3-19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 52-56 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 4,748,512 to Armstrong.

[claim 52]

Armstrong teaches a method of encoding at least a portion of an image, comprising the steps of:

(a) defining a region of an image having pixels at locations identifiable by two non-collinear axes, each pixel having an appearance (Col 4 Lines 24-50, Fig 1 and 2);

(b) analyzing axis-wise said pixels to determine sequences of pixels having substantially identical appearance (Col 5 Lines 41-43);

(c) comparing a sequence of pixels occurring along a first axis-wise traverse with a sequence of pixels occurring along a successive axis-wise traverse (Col 5 Lines 44-47);

(d) in the event that said comparison discloses two or more successive traverses having an identical number of distinct appearances in an identical progression, recording a number corresponding to the number of such successive traverses, recording for said first traverse a series of values containing a first value representing the appearance and a second value representing the number of successive pixels having said appearance (Col 5 Lines 1-2);

(e) in the event that said comparison fails to disclose two or more successive traverses having an identical number of distinct appearances in an identical progression, recording the number one and recording for said traverse a

series of ordered pairs comprising a first value representing the appearance and a second value representing the number of successive pixels having said appearance (Col 5 Lines 3-4) ; and

(f) repeating steps (c), (d) and (e) until said pixels of said region are completely encoded (Col 5 Lines 36-67, Col 6 Lines 1-23, Fig 1 and 2).

Armstrong further teaches the data for each line is stored in four fields. One field stores the number of identical lines, second field stores number of leading zeros, third field stores 8 image points, fourth field stores number of points having the value of the last point in the third field. The third and fourth field are then repeated until the line is encoded (Col 5 Lines 1-35, Fig 3). Armstrong does not specifically teach the use of an ordered pair. It would be obvious to one skilled in the art at the time of the invention that the third field relates to appearance and the forth field relates to the number of successive fields as required by claim 52. Armstrong does not teach the storage of values for successive traversals containing identical number of distinct appearances in an identical progression. It would be obvious to one skilled in the art at the time of the invention that Armstrong stores the number of identical rows therefore the second values, of the ordered pairs, for each successive traverse is recorded as required by claim 52.

[claim 53 and 55]

Armstrong teaches the method of claim 52 wherein said axis-wise traverse comprises traversing a selected one of a row and a column (Col 5 Lines 36-43 and Lines 65-66).

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[claim 54]

Armstrong teaches the method of decoding an encoding image, comprising the steps of:

- (a) reading from a memory a location of a region within an image, said region defined by one or more pixels at location identifiable by two non-collinear axes, each pixel having an appearance (Col 7 Lines 5-22);
- (b) reading from said memory a number corresponding to the number of successive traverses along one of said two non-collinear axes, said traverses having an identical number of distinct appearances in an identical progression (Col 7 Lines 23-35);
- (c) reading a series of ordered pairs comprising a first value representing an appearance and a second value representing the number of successive pixels having said appearance (Col 8 Lines 4-18)
- (d) rendering pixels along said traverse according to said series of ordered pairs;
- (e) in the event that said number read in step (b) reduced by one the steps of:
 - (1) reading from memory a series of values corresponding to said second value of each ordered pair read in step (c); and
 - (2) for each such value read in step (e)(1), rendering a sequence of pixels corresponding to said second value, each pixel having an appearance corresponding to said first value of said ordered pair read in step (c); and
- (f) repeating steps (b) through (e) until said pixels of said region are completely rendered (Col 7 and Col 8 Lines 1-34, Fig 5-7).

[claim 56]

Armstrong teaches the method of claim 54 wherein rendering a pixel comprises displaying said pixel using at least one of a color, a brightness, a blinking, a flashing, and a display mode (Col 5 Lines 8-11).

[claim 57]

Armstrong the method of claim 54 further comprising the step of recording on a computer-readable medium a representation of said rendering of pixels in said region (Col 5 Lines 51-67, Fig 5).

Claims 65⁷¹ are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,501,853 to Gregg et al in view of Armstrong.

Gregg teaches the method of encoding at least a portion of an image, comprising the steps of:

(a) defining a region of an image having pixels at locations identifiable by two non-collinear axes, each pixel having an appearance (Col 1 Lines 32-38, Col 4 Lines 33-39, Col 5 Lines 40-50, Figs 1-2);

(b) defining pixels in said image that represent a background, said background having a characteristic background appearance (Col 1 Lines 32-38, Col 6 Lines 61-67 and Col 7 Lines 1-7);

(d) comparing a sequence of pixels occurring along a first axis-wise traverse with a sequence of pixels occurring along a successive axis-wise traverse (Col 7 30-67, Col 8, Figs 3-5)

(g) repeating the encoding steps until all the pixels have ben completely encoded (Col 7 30-67, Col 8, Figs 3-5).

Gregg does not fully teach the following steps:

(e) in the event that said comparison discloses two or more successive traverses having an identical number of distinct appearances in an identical progression :

(i) recording a number N corresponding to the number of such successive traverses ;

(ii) for the first of such successive traverses, recording for each sequence of pixels having a distinct appearance different from said characteristic background appearance an ordered triple comprising a first value representing said appearance, a second value representing the number of successive pixels having said appearance, and a third value representing an offset defining a starting position of said two or more successive pixels with respect to a pixel at a known position (Col 7 30-67, Col 8, Figs 2-5).

(iii) for the following of said N minus one traverses, recording for each sequence of pixels having a distinct appearance different from said characteristic background appearance an ordered double comprising a first quantity representing the number of successive pixels having said appearance indicated by the first value of the ordered triple recorded for the corresponding sequence of pixels in the first traverse, and a second quantity representing an offset defining a starting position of said two or more successive pixels with respect to a pixel at a known position (Col 7 30-67, Col 8, Figs 2-5).

(f) in the event that said comparison fails to discloses two or more successive traverses having an identical number of distinct appearances in an identical progression, recording the number one and recording for said traverse a

series of ordered triples comprising a first value representing an appearance different from said characteristic background appearance, a second value representing the number of successive pixels having said appearance, and a third value representing an offset defining a starting position of said two or more successive pixels with respect to a pixel at a known position;

Gregg teaches the method of storing the ordered triple comprising the appearance, number of successive pixels, and offset from a known pixel (Col 7 30-67, Col 8, Figs 2-5). Gregg further teaches the use of different encoding methods for each region (Col 3 Lines 15-25). Gregg does not teach the recording of a number of N corresponding to the number of identical traverses nor the recording of one for a single traverse.

Armstrong teaches in the event that said comparison discloses two or more successive traverses having an identical number of distinct appearances in an identical progression, recording a number corresponding to the number of such successive traverses (Col 5 Lines 1-2). Armstrong further teaches in the event that said comparison fails to disclose two or more successive traverses having an identical number of distinct appearances in an identical progression, recording the number one for the number of successive traverses (Col 5 Lines 3-4). It would be obvious to one skilled in the art at the time of the invention to combine the encoder of Gregg with the encoder of Armstrong in order to perform a desired image encoding for a region.

[claims 66 and 69]

Gregg teaches defining two non-collinear axes comprises defining a row and column (Col 5 Lines 12-16).

[claim 67]

Gregg teaches wherein analyzing a pixel to determine an appearance comprises analyzing for at least one of a color, a brightness, and a display mode (Col 1 Lines 32-38, Col 7 Lines 30-43).

[claim 68]

Gregg and Armstrong teach the method of encoding the video as required by claim 65. Gregg suggests the use of the encoder in transporting video information for such applications as video-on-demand (Col 1 38-63). Therefore at the other end of the system there would be a decoder to process the encoded video (Official Notice). It would be obvious to one skilled in the art at the time of the invention to use the provided encoded video stream of Gregg and Armstrong to then decoded the video stream in order to view the stream in a video-on-demand system.

[claim 70]

Armstrong teaches wherein rendering a pixel comprises displaying said pixel using at least one of a color, a brightness, a blinking, a flashing, and a display mode (Col 5 Lines 8-11).

[claim 71]

Armstrong the method of claim 54 further comprising the step of recording on a computer-readable medium a representation of said rendering of pixels in said region (Col 5 Lines 51-67, Fig 5).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,341,178 to Parker

US Patent 5,267,333 to Aono et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 703-305-5543. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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